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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,058	07/02/2003	Jerome F. Mayer	005950-791	6660
21839	7590	07/27/2005	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			NGUYEN, TAM M	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,058

Applicant(s)

MAYER ET AL.

Examiner

Tam M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/03/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10, 12-15, 16-18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kresge et al. (5,183,561) in view of Zhou (6,476,086)

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Kresge discloses a method for demetallizing a hydrocarbon feedstock by contacting the feedstock with a catalyst comprising nickel, molybdenum, and alumina. The catalyst has a pore size of from 13 to 200 Angstrom. Metals removed from the feed may include nickel, iron, and sodium. The process is operated at a temperature of from 600- 850° F and at a pressure of at least 400 psi. (See abstract; col. 4, lines 30-34; col. 17, lines 14-51; col. 18, line 31-66)

Kresge does not disclose a filtering step to produce a filtered hydrocarbon

Zhou discloses a method for separating particles from an F-T derived feed and does not disclose that the inorganic having particle sizes less than 0.1 microns

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kresge by utilizing a feedstock from the Zhou process because Kresge teaches that any feedstock comprising metallic contaminants can be employed in the process of Kresge including the feedstock derived from a F-T process.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kresge by utilizing a feedstock comprising metals having the claimed sizes because the catalyst of Kresge is similar to the claimed catalyst. It would be expected that the catalyst Kresge would affect to remove metals having any size including the claims size.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claims 1 above, and further in view of Okagami et al. (5,989,412).

Kresge does not disclose that the catalyst is configured as a hollow cylinder.

Okagami discloses a hydrodemetallizing catalyst having a cylinder shape. (See abstract; Figures 1-9)

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kresge by utilizing a catalyst having a cylinder shape as taught by Okagami because such shape is effective to remove metals.

Claims 16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claim 1 above, and further in view of Cain et al. (2,877,257).

Kresge does not disclose an acid treatment step as claimed.

Cain discloses a process of removing contaminants including metals from a hydrocarbon feed by contacting the hydrocarbon feed with an acidic stream in an extractive column. (See col. 1, lines 15-36; col. 2, lines 48-51; col. 3, lines 9-75; col. 4, lines 1-43; col. 7, lines 41-73; col. 8, lines 1-24; the examples and Figure 2)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kresge by utilizing the acidic treating step of Cain because adding such step in the process of Kresge would enhance the removal of metals from the feedstock.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tam M. Nguyen
Examiner
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TN
7/25/05

